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Anti-MPS1 Picoband Antibody

Catalog # ABO11711

Product Information

Application	WB, IHC-P
Primary Accession	P42677
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for 40S ribosomal protein S27(RPS27) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	6232
Other Names	40S ribosomal protein S27, Metallopan-stimulin 1, MPS-1, RPS27, MPS1
Calculated MW	9461
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Tissue Specificity	Expressed in a wide variety of actively proliferating cells and tumor tissues.
Source	Eukaryota
Protein Name	40S ribosomal protein S27
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E. coli-derived human MPS1 recombinant protein (Position: P2-H84). Human MPS1 shares 100% amino acid (aa) sequence identity with both mouse and rat MPS1.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

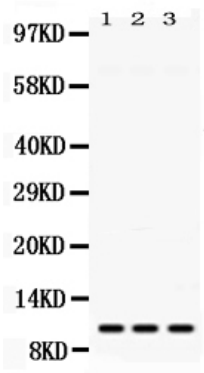
Protein Information

Name	RPS27 (HGNC:10416)
Synonyms	MPS1
Function	Component of the small ribosomal subunit (PubMed: 23636399, PubMed:8706699). The ribosome is a large ribonucleoprotein complex responsible for the synthesis of proteins in the cell (PubMed:23636399). Required for proper rRNA processing and maturation of 18S rRNAs (PubMed:25424902). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).
Cellular Location	Cytoplasm. Nucleus, nucleolus
Tissue Location	Expressed in a wide variety of actively proliferating cells and tumor tissues.

Background

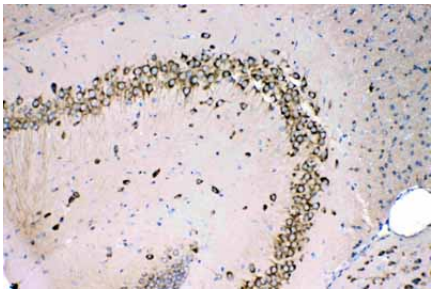
40S ribosomal protein S27, also known as metallopan-stimulin 1 or MPS-1, is a protein that in humans is encoded by the RPS27 gene. Ribosomes, the organelles that catalyze protein synthesis, consist of a small 40S subunit and a large 60S subunit. Together these subunits are composed of 4 RNA species and approximately 80 structurally distinct proteins. This gene encodes a ribosomal protein that is a component of the 40S subunit. The protein belongs to the S27E family of ribosomal proteins. It contains a C4-type zinc finger domain that can bind to zinc. The encoded protein has been shown to be able to bind to nucleic acid. It is located in the cytoplasm as a ribosomal component, but it has also been detected in the nucleus. Studies in rat indicate that ribosomal protein S27 is located near ribosomal protein S18 in the 40S subunit and is covalently linked to translation initiation factor eIF3. As is typical for genes encoding ribosomal proteins, there are multiple processed pseudogenes of this gene dispersed through the genome.

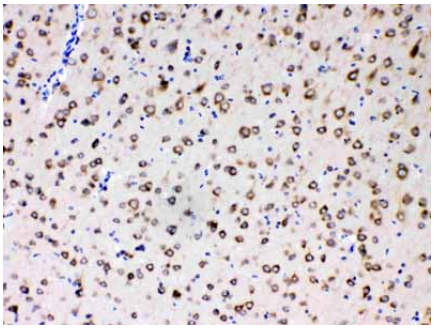
Images



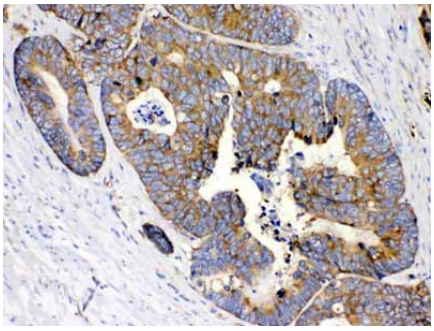
Western blot analysis of MPS1 expression in rat spleen extract (lane 1), mouse liver extract (lane 2) and HELA whole cell lysates (lane 3). MPS1 at 10KD was detected using rabbit anti- MPS1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11711) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

MPS1 was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti- MPS1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11711) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .





MPS1 was detected in paraffin-embedded sections of rat brain tissues using rabbit anti- MPS1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11711) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



MPS1 was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- MPS1 Antigen Affinity purified polyclonal antibody (Catalog # ABO11711) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .

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